New Technology in the Human Services

Incorporating
Computer Applications in Social Work

VOLUME 4 NUMBER 3 AUTUMN 1989

The Edinburgh Conference Papers:

The Management of Information

Information Needs and Decentralisation

Training for a New Information System

Information System Design

Performance Indicators and Information

Computerising Client Records

Plus... More North American Software

Contents

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UP FRONT

Heading North

The Edinburgh conference

This issue is devoted to reproducing papers delivered at the ADSW/LAMSAC conference held in Edinburgh in May 1989. Described as the first major northern conference on information systems and social work services, and sponsored by ICL, it gave personal social services staff from Scotland and the North of England the chance to come together to study the subject without having first to trek down to Birmingham or points further south. As well as sponsoring the conference, ICL are also making a contribution to the production costs of this issue of the journal, so that more copies with more pages can be printed, and the Edinburgh papers given wider circulation.

The conference had two main speakers, William Warburton and Peter Bates, a number of workshops, and a selection of displays and demonstrations. In this issue we begin with Peter Bates view, as a Director of Social Work, on the requirements for the effective management of information. This is followed by contributions from three workshop speakers. Allan Buckley looks at the ways information needs to be handled in a decentralised service structure - an area of concern for William Warburton, who suggests that decentralising services could make the process of maintaining an effective information system more difficult. Roger Dove, in his paper, stresses the vital issues of training staff to make use of and contribute to computerised systems. Mike Gunn offers a set of guidelines for a sensible approach to system design.

In the second of the keynote papers William Warburton provides a thorough presentation and critique of performance indicators, focusing on the key indicators developed for social services departments by the Social Services Inspectorate.

The final presentation from Edinburgh is my own look at client information systems, and speculation about where they are set to move in the coming decade.

Centre for Human Services

It will now be a regular feature of New Technology in the Human Services, to provide a list of software of potential use in the human services. As in the last issue this continues to concentrate of North American software gathered together by Dick Schoech for CUSSNet. Readers may like to know that a much stronger emphasis will be placed on UK software in our next issue, including an update of the list last circulated in 1987 by Programs in Practice (PIP).

This software inventory is being prepared by the Centre for Human Services, which has, as of Issue 3 of Volume 4, taken over responsibility for all aspects of the journal,

editorial, production and distribution. Most aspects of editorial policy will remain: in particular we shall continue to publish papers from agency staff and academics, and welcome contributions from any of our readers. However, as the Centre for Human Services gathers momentum, we do plan to offer both a comprehensive cataloguing service, and a range of software reviews, some of them in considerable depth. We expect to begin such reviews in the next issue, focusing on welfare benefits packages.

It is a pleasure to place on record my own appreciation, and I am sure that of many readers, of the pioneering efforts made by Stuart Toole and Birmingham Polytechnic which got this journal under way. Stuart will continue in an editorial capacity, but his spare room no longer has to double as bedroom and the journal's office, and his family will not spend so many boring hours addressing and licking envelopes.

HUSITA 2

Another pleasure is the opportunity to announce the plans for the next International Conference on Human Service Information Technology Applications - HUSITA 2. It is scheduled for June 26th to 29th 1991, and the venue is New Brunswick, New Jersey. Preparations for the conference are being co-ordinated by Marcos Leidermann of Rutgers University, who is keen to attract as many Europeans as possible to cross the Atlantic. We will keep you in touch with details as they emerge.

Bryan Glastonbury

THE MANAGEMENT OF INFORMATION

Peter Bates

Introduction

What I want to deal with is information and the increasing need for efficient management and operational systems within social work. Specifically I want to look at the current situation in social work and the changes taking place which will require fundamental revisions of our information systems. I also want to review our general use of information technology in the Department and the need for a user led information system strategy. Finally I want to highlight the steps ADSW and the Scottish Office require to take to address all of these issues.

If you think about it, almost every job we do in social work relies on the ability to pass and share information. As a director, I constantly need updated information on budgets, spending levels, capital programmes, and about client services and resources. At a local level, social workers and other practitioners constantly have to give advice and information to clients and other agencies about a whole range of subjects. This can be referred to as counselling or advocacy, but in many respects it is the dissemination of information. The type and degree of information requested varies and can be as simple as a request for social clubs in the area, or as complex as a child abuse review. The underlying feature in all of

this is the need for information, which can be easily retrieved, updated and has a relevance for particular groups.

Current Situation - Need for Efficient Information Systems

You may ask yourself why do we need to have good computerised information systems now, when we have struggled along all this time with our manual systems and ledgers. The answer is simple and lies in the changes taking place in Local Government today. This Government has been particularly active in passing legislation which has had direct consequences for us as managers and practitioners. Apart from the major pieces of legislation which have directly affected us and our clients, e.g. the Social Security Acts and the Mental Health and Disabled Rights Acts, new procedural legislation covering Personal Access to Files strike at the very heart at the way we collect and record information about clients.

Added to this are the increasing number of reports recommending changes in practice and procedure, which will require careful thought and reviews of the way we deliver and monitor services at the moment. The Audit Commission has clearly stated in its reports that management systems in the social services need to be overhauled to meet the challenges of the nineties in general and privatisation in particular. We have been spared the worst effects of compulsory competitive tendering so far, but the parliamentary grapevine suggests sweeping changes could be imminent.

The Griffiths Report, while backing continued Local Government control of community care projects, has been critical of the monitoring arrangements currently used by social services. Though I think the management systems in social services are too readily criticised by Central Government, which undermines the sterling efforts of many authorities, I agree that practices in inter-agency initiatives could and should be improved.

A further factor in analyzing the changes in social services today which demand new and improved information systems, is the increasing numbers of clients now seeking social work assistance. The rising number of child abuse referrals has been well documented by the media, as has the increasing elderly population, particularly those aged 75+ who pose particular demands on the Department. Less well documented, but just as relevant in terms of demand on social workers' time, is the rising number of clients in severe financial difficulties who require assistance and guidance to keep them from the clutches of illegal moneylenders.

These rises in referrals and caseloads have not been met with a proportionate increase in manpower, for several reasons. These include the obvious ones like lack of finance and shortages of skilled staff, but a much more pressing reason has been the Department's inability to monitor and record systematically information which highlights referral/caseload rates and resource requirements. Either the information is not collected or is collected only in aggregated formats which do not lend themselves to closer scrutiny.

An obvious result of having an increased caseload and static resources to deal with the problems is that practitioners have less and less time to spend with individual clients. This increases the pressures on social workers and other front-line staff to use their time effectively and productively. When I was Deputy Director at Strathclyde, the Department undertook a diary exercise of social workers' activities. I must admit I was very surprised to find that 25-30% of social workers' time is taken up with what is regarded as administrative duties, searching case

records, logging referrals, finding resources, digging out procedural notes, checking other workers' involvement in cases, and so on.

All of the above tasks would probably be regarded by most workers as typical of a caseworker's daily activities and are essential mechanisms of a case recording system. While I would accept that most of these activities are essential, the time taken to carry out these tasks is unnecessarily long, due to the cumbersome information and recording systems presently used by many departments. It is not uncommon for a social worker on intake to have to write a client's name and address 4 or 5 times as part of the documentation relating to a referral. Checking other workers' involvement in a case can mean sifting through 5 or 6 card index systems. All of this time spent supporting and maintaining duplicate manual information systems is time taken away from working with clients.

In other industries and sectors the need for efficient information systems has long been recognised. In the private sector good information and recording systems have been the life blood of many organisations, and has ensured their commercial survival. In the public sector we are not driven by motives such as competitive edge or profit margins, at least not yet, but we do have the same needs for efficient and effective communication and information systems. This is particularly so in authorities who have adopted a decentralised approach to service delivery and have many small sub-units and intake offices to liaise with.

Most organisations now accept the role new technology and electronic systems can play in providing efficient management information systems and assisting operational activities. Technology can play an especially important role in collating and analyzing large volumes of data, e.g. in client index systems, but it has also been particularly useful in assisting communication between offices using devices such as electronic mail, thereby reducing paper transfer. Searching for minutes, legislation, or procedural notes is also much easier using text retrieval facilities, while presentation of reports is simplified using new office automation techniques, such as word processing and desk top publishing.

Comparative Investment in Information Technology - Local Government and Social Work

The need for technology to assist industry and the public sector has been voiced and debated over the years. Some industries have now responded by investing in systems which will give them a comprehensive management and operational information service. The finance sector is a leading example. The public sector generally does not invest in technology and indeed, in 1988, spent the lowest of all industries per employee.

Local government it has to be said does spend at a considerably higher rate than the public sector as a whole. However, an analysis of individual department spending shows that education and social services spend considerably less than all industries as a whole. So why should social work spend less on information technology than other departments like finance and industry generally? Many reasons can be put forward, such as:

(a) Fear of innovation;
(b) Fear of de-personalising the service;
(c) Lack of computer skills and awareness.

All of these have been given as possible reasons. However, a recent survey carried out by Dagenham SSD on all social

services departments in Britain threw up some interesting results as to social services general low usage of new technology. Of the 100 authorities who responded to a questionnaire:

1. Only one said it was fully in charge of its own computing resources.

2. For all others the authority's computing services were located in other departments. Most commonly in Finance (55%) or Computer Services (25%).

3. Over two-thirds of those departments replying were reliant either totally or in part on the authority's mainframe for computer facilities. The general effect of this mainframe dominance was to give considerable control over computer development to those who run the mainframe.

4.In the majority of authorities (over 60%) the setting of priorities was carried out corporately, often through chief officers' management teams.

5. While SSD funded most of the computer developments from their own budgets, corporate technical strategies meant that for the most part, corporate permission was needed to purchase particular pieces of equipment or software.

6. Many criticisms of the central planning system were made including:

a) They were excessively bureaucratic;

b) Mainframe access meant financial systems given high priority;

c) A cost benefit analysis approach to proposals often tended to produce low priorities for users such as social services departments;

d) With a large number of central computing divisions located within finance departments, many other departments felt finance gained too high a priority in terms of developments.

Given that in all but one authority the main computing functions were located outside social work/services, relations between central computer and social services staff played a key part of computer development. While some reported having good relations with computer services, many authorities had criticisms to make. These included:

a) Lack of understanding and interest by computer staff of social services needs;

b) Lack of commitment;

c) Development times for projects were too long and costly.

Many social services departments have already started to make themselves more independent of central computing by employing their own specialist staff. This was seen as one important way social services could control its own computer development. A number of departments who have controlled their own development work were of the opinion that it was quicker and more effective than leaving the problem with central computing. Relations with central computing in these authorities were re-defined: central computing provided specialist advice, but the project was controlled and managed by the social services department. This allows, in the eyes of one department quoted, "for the

project to fit the department's culture and is not seen as computing in its own right."

The recommendations reached by the Dagenham report were:

1. The adoption of a clear corporate strategy on which departmental computing strategies can be based;

2. Control of project development, within the constraints of the corporate strategy, to be undertaken by the individual department;

3. Departments should control their own computer development budgets;

4. Central computing should provide a specialist service to departments on a contractual basis especially in view of proposed competitive tendering practices.

A study carried out by Kearney Management Consultants for the Department of Trade and Industry into "barriers and opportunities of information technology", found that the major constraints of introducing information technology to any organisation were cost justification or dubious or controversial benefits as the most important, with lack of funds and need to consolidate existing applications as next important.

In terms of the cost justification argument Kearney found that "in organisations employing manual and clerically intensive systems some of the most obvious benefits were ignored. This was partly because of a lack of ability to analyze the business needs and identify the potential. The barrier here was management itself." Minor constraints such as trade union opposition and negative staff reaction can be put down to poor planning and implementation. One example quoted a less than successful implementation because staff had not been properly consulted or trained to use the system.

The same report found that the main factors which contributed to the success of a project are quality of staff, co-operation between technical and user staff, proper training, and a clear definition of requirements.

Need for Information Systems Strategy

Having a clear definition of requirements is only arrived at by having a rigorous analysis of user needs and management commitment. Ideally this should be contained in the department's information system (IS) strategy. An IS strategy is not the same as an information technology (IT) strategy. This is a crucial point. Managing information technology to best advantage can only be accomplished if you know what information is needed and how it is used, and could be used, through your authority. Only the users of information systems in your authority know that. From this view of the crucial role of information in organisations a number of important points follow:

a) An IS strategy is driven by the need of the users of the information systems.

b) Improving an organisation's overall performance means looking first at how information can be used to greater advantage; this is especially true of information-rich organisations such as local authorities and social work particularly.

c) Developing an IS strategy requires a coalition of those who determine the purpose and aims of an organisation (its officers), those who carry out the necessary tasks (the users of systems), and those who develop and maintain the technology (the data processing

professionals).

Systems are the responsibility of the users who must define what they want. At the end of the day users get the systems they deserve. So, if you are going to spread the responsibility for systems around the organisation, you need a strategy for IS, not a purely technical IT strategy.

Coalition is the key word in an IS strategy. You need the technical experts to work out how to do it; you need the users to define the applications; and you need senior management to make strategic decisions, including how much resource should go into an application. This approach starts with senior managers rigorously examining their organisation, the forces which impact on it, and the strategies which it adopts to ensure success in achieving its goals. You have got to start from the business angle. Success depends on that. But once you have completed a business analysis, you can say what are the ideal information systems you would like to have in place.

Lack of integration is one serious weakness almost everyone identified with. The necessity of starting with the organisation's overall aims and objectives and developing a strategy for achieving them, emphasises the fact that developing an IS strategy can only be done from the top. The coalition of top management, users and specialists must be led from the top.

Having established the mechanics for devising a strategy which reflects users information requirements, I want now to move on to the type of information managers and practitioners require.

Social Work Information Needs

1. *Client Index:* a key element of any social work information system must be the creation of a client index. Since most information requirements of practitioners are about individual clients and their resource needs and utilisation, it is important that an information system can generate quickly and easily accurate data about a selected client. In addition to personal details about a client, a quick overview or "frontsheet" of client contacts and main problems addressed should be included.

A particular problem which poses difficulties for information systems is illustrated in the area of casework with elderly clients. Many of these clients have needs for several types of social work services, such as Home Help, OT, Day Care, Meals on Wheels, Respite Care, etc. The present structure of many social work departments often means these services are provided through different sections or offices, who have only limited contact with each other. As a result it is very difficult to obtain an overview of all the social work services an individual client receives, thereby providing barriers that affect co-ordination of the care of elderly clients.

2. *Management Needs:* from a management point of view the need for summary statistics which have been extracted from efficient area team operational systems, such as client registers, is becoming increasingly important. Apart from the need to keep Committee and Central Government informed of trends in demand for services, management must also use client and resource information to estimate the budgetary requirements of the department in the future, to plan for new buildings, and to support increased resourcing of particular services.

3. *Direct Use with Clients:* I have been particularly pleased to see a growing concern with the use of computer systems to assist directly work with clients who have behaviourial or learning difficulties.

This is an area which is attracting a lot of interest in our adult training centres and day centres. They constantly struggle to find the most stimulating medium to train members about social skills, vocational issues, etc.

4. *Public Information Systems:* the need to provide other types of assistance/information to clients and service users have also been highlighted in recent years. Giving the general public information about council services, lists of resources, contact people for local clubs and advice on state benefits, etc., has proved a popular decision for some councils. This has been aided where viewdata terminals are provided in public places, giving easy access and a centrally updated service. The Berkshire service is particularly noteworthy and other councils, in addition to providing a general service for the community, are now providing more specific information services for members and staff. I think it is fair to say that in Scotland and the North of England some lessons have to be learned from our more southerly colleagues in this respect.

The Next Steps

So far I have considered the increasing need for efficient information systems in social work and the role technology could play in assisting this task. I have also outlined, briefly, some of the main information needs and the mechanisms for establishing and implementing these. I want to conclude by highlighting the priorities that lay ahead for the Association of Directors of Social Work (ADSW) and the Scottish Office, to ensure that progress is made on all the above issues in the next few years, since this will be a very difficult period for the personal social services.

One of the first priorities is for ADSW and the Scottish Office to act as enablers and catalysts for all Scottish local authorities who are jointly facing similar problems with the same limited resources. In terms of information systems some progress has been made already with the joint planning statement exercise. This will ensure that salient statistical details about each authority are being collected in a standardised and uniform way. There is more opportunity for joint working of this nature to take place. National specifications for information about particular client groups, such as for child abuse and community service orders, are being agreed using a local and central government joint venture approach. Agreed specifications could then be adopted by every authority, who only need to implement them within their own information system structure.

Internally ADSW have been addressing the need for shared specifications of information systems by setting up a special Information and Research Group within the Policy and Resources Committee. I would hope that the Information and Research Group, in collaboration with SWSG, would also begin exploratory surveys and investigations into the implications and information requirements of issues like compulsory competitive tendering, inter-agency initiatives as highlighted by Griffiths, the value of de-centralisation for clients and staff, and the ramifications of adopting a consumer led approach to the provision of services.

The author is Director of Social Work for Tayside.

INFORMATION NEEDS AND DECENTRALISATION OF SERVICES IN SOCIAL SERVICES DEPARTMENTS

Allan Buckley

My basic aim in this paper is to stimulate a debate which readers will find useful in considering the questions of decentralisation of services and information technology needs within their own authorities. Rochdale is one of the ten metropolitan boroughs in Greater Manchester, with a population of 206,000. The birthplace of the Co-operative Movement, it has a tradition of radicalism and innovation in its politics and its public services. Since 1986, the Council (which is Labour controlled) has been committed to the decentralisation of its services on the basis of two fundamental principles:

> Council services should be provided as integrated services, and not simply as the services of individual departments.
>
> Power and decision making should be devolved to a local level through elected members, residents, and the officers who manage and deliver the services.

In March 1989 a strategy document - *Going Local* - listed six key elements in the Council's decentralisation strategy:

> 1. A Community Development and Service Delivery Approach. This approach will be the basis for decisions at a local level concerning the style, level, and priorities for local service delivery, and for ensuring that services of quality are delivered.
>
> 2. Full Integration of Services at Neighbourhood Level. The neighbourhood, not centrally located departments, should be the prime focus for the organisation and delivery of services.
>
> 3. Local Decision Making. Under this heading we see the most radical departure from the present method of planning, managing, and delivering council services. A division is proposed between policy making and strategic planning. The latter will remain the province of centrally located service departments. Policy implementation and service delivery will be carried out through neighbourhood offices. It is proposed that this division of responsibilities will be achieved through the creation of a new Neighbourhood Services Directorate, which will be headed by a new Chief Officer responsible for Neighbourhood Services.
>
> 4. Local Budget. The ability of members and officers to be able to control budgets at a local level follows logically from the thinking behind these proposals.
>
> 5. Achievement of Equal Opportunities Objectives. Decentralisation is seen as an important opportunity to move forward in the implementation of the Council's Equal Opportunities policies.
>
> 6. A Five Year Programme. A rolling programme of development should lead to the introduction of decentralised structures over a period of five years. These structures will be introduced before staff and resources are physically decentralised.

The questions which would be raised for any social services or social work department affected by such proposals would centre on its legal responsibilities, translated into professional standards for service delivery. In common with other social services departments in England and Wales, and social work departments in Scotland, my own department has a wide range of responsibilities which are delegated to the Director, and from him to other departmental managers - in the case of Rochdale, these total 230 separate items.

Some of these responsibilities are quite

specific: the approval of social workers under the Mental Health Act, 1983; the termination of access by parents to their children; the power to make arrangements for the Adoption of Children. Such specific responsibilities are increasing: as from June 1st 1989, under the provisions of the Accommodation Children (Charge & Control) Regulations 1988, the Director must personally approve, or delegate to a named Senior Manager, the placement of children in the care of the local authority at home "on trial", or with relatives or friends.

In addition, the DHSS document *Working Together: a Guide to Arrangements for Inter-agency Co-operation for the Protection of Children from Abuse*, published in 1988, made clear both the legal and central co-ordinating responsibilities of social services departments in the field of child protection. Whilst these factors are common to all social services departments, there is an added strain between radical proposals for decentralisation and the aims and objectives of a department which, like my own, is essentially specialist in its systems of services management and delivery. My department's approach to these strains is to regard them as problems which must be translated into opportunities to change and develop both our management and delivery of services. This approach is summarised in the title of the document which will act both as a review of the Department's services in light of the Council's decentralisation proposals, and as a basis for consultations with the Department's staff - *Going Local - Problems and Opportunities for Social Services.*

Matching the Information System to the Departmental Structure

Whatever final decisions are made by the Council regarding the structure of the Social Services Department following decentralisation, the quality of the department's information systems will be of fundamental importance. We will probably have smaller operational units, working alongside other council services. The integration of fieldwork, residential, and day services, which presently takes place at assistant director level, will be delegated to a different management level, and the Department's team leaders will probably be responsible (on a day to day "site" management basis) not to specialist social service area managers, but to generalist neighbourhood services managers.

Three elements need to be co-ordinated into a comprehensive information system. These are:

The Council's Corporate Information Processes. These are the responsibility of the Policy Unit of the Chief Executive's Department, which has been in existence for about two years. Included in this Unit's responsibilities are the Council's system of Performance Review and the Council's Computer Strategy.

The information available from the Department's Operational Division. The basis of computerised information for the Department's operational services is a Client Index System, which has been devised within the Authority, and has just completed a pilot phase in one of the area teams.

The Department's Headquarters Management Information System. Work is under way on a management information network which will bring together the presently separate elements of data produced and received at headquarters in conjunction with national bodies - notably the Department of Health, and CIPFA, and

Departmental information on budgets and resources, including staffing. An important element in this information network will be the DHSS's Key Indicators. The central, co-ordinating element will be the Council's mainframe computer.

The Council's system of Performance Review is intended to provide a consistent monitoring of service standards and of the use of resources for all Council services. The effectiveness of the Performance Review system in dealing with decentralised services will depend upon the integrity of the information system. I would contend that the first arbiters of whether an information system has integrity are those who will need to use it. If the system is not perceived by operational managers and workers as relevant and useful, then it will fail, whatever the perceptions of senior managers, experts, and researchers. In this respect information systems need to fulfil the following requirements:

SPEED: certainly a fundamental requirement for a client index system.

ACCURACY: by definition, the system will not have integrity if the information which it provides is inaccurate. So far as client index systems are concerned, it is important to remember that these are not simply lists of names, addresses, and services rendered, but are an arm of the social services department's legal responsibilities and, as such, will make a critical difference to decision making, notably in child protection matters.

RELEVANCE: the information provided must be needed by, and of use to, the staff who are to make use of it.

CONCISENESS: a related point is that staff will judge information systems not only by their relevance to the work which they are doing, but by their ability to provide that information quickly and easily - relevant information which is buried and needs selecting from a mass of data.

BALANCE BETWEEN "HARD" AND "SOFT" INFORMATION: whether the system is able to provide accurate and relevant information concisely depends upon whether the authority, or the individual department, is clear about the policies and, ultimately, the values which underlie its service provision. Unless these are known, the collection of information is an unfocused and self-perpetuating process which has no relevance to the real life of the Authority or the Department. The reflection of that real life in an information system depends upon the collation not only of "hard" data, but on the ability to collate less quantifiable factors, such as the views of services users and main grade staff both on service provision and management.

In conclusion, I hope that this outline of my view of the relationship between information systems and decentralisation, whilst not answering all the questions, succeeds in identifying some of the issues which need to be tackled, if we are to design information systems which will be able to meet the very considerable challenges which face us in the coming decade.

Allan Buckley is Deputy Director of Rochdale Metropolitan Borough Council Social Services Department.

IMPLEMENTING A NEW SYSTEM: THE IMPORTANCE OF TRAINING

Roger Dove

This is not a learned treatise on training: rather it is a review of the lessons learned during the implementation of one particular system in one particular setting. It is likely, however, that similar circumstances could be encountered with other implementations and these thoughts are offered in the hope that others can learn from our experience.

The system being introduced was the core module of SOSCIS (Social Service Client Information System), an ICL mainframe application which contains some scope for customisation. This was installed over a period of twelve months in a region with a population of around 200,000 but scattered over a land mass bigger than the whole of Wales. Social work service is provided through fourteen area teams and three hospital teams with area team leaders acting as "gatekeepers" for all client services in their respective areas. There are approximately 7,000 active cases on the books at any one time.

My own involvement in the project began after the decision had been taken on which system to purchase, and when the need for a Project Leader to oversee the implementation had been identified. At that time I was employed as Departmental Training Officer, and my only previous involvement with computer applications was over twenty years ago when I turned my back on industry in order to "work with people". Needless to say, hardware has changed almost beyond recognition in the intervening years, but I was to find that my industrial experience of systems work was a decided asset.

The Project Team was completed by two administrative staff who were seconded to me, initially on a part-time basis but subsequently full-time. These were both much more computer literate than me in contemporary terms, but neither had any formal computer training or experience in implementing systems. As a team, therefore, we had a useful blend of knowledge and experience, but we also had a great deal of learning to do as we went along. The following observations are based on the lessons which we learned in the process, and on the successes and problems which we experienced.

In retrospect we were able to identify six distinct stages which the project went through and which I will describe briefly as follows:

1. **System Specification**: defining the purpose of the system and the required outcomes.

2. **System Design**: deciding whether to go for a bespoke system or "off the peg" model.

3. **Development**: the work which needs to be done to fill in the detail and get a thorough knowledge of how the system will operate is a pre-requisite to designing training programmes.

4. **Training**: must obviously be task centred, but must not lose sight of the personal factor.

5. **Installation**: when there is a need for support and consolidation on training.

6. **Backtracking**: where certain fundamental questions need to be addressed:

   (a) are the data accurate?
   (b) is the system operating efficiently and effectively?
   (c) is it delivering the goods as specified at Stage 1?

Our task as a team commenced at Stage 3 of this model with what we called the *development* of the system which

involved:

(a) thoroughly digesting the supplier's manuals;

(b) setting up a test package on which we could simulate the operation of the system and try out our ideas;

(c) conferring with staff on codes and description, and then with the suppliers on the scope for customisation;

(d) designing forms and then testing the first drafts alongside existing paperwork on the manual system;

(e) writing a **readable** User Guide which was to become the "bible" for users and the basis of our training programmes.

This process took us all of six months and I am quite convinced that the relative ease with which the training and implementation was done owes a great deal to the thoroughness of this development work. The one area in which I think we could have improved was in consulting with staff, and all I would say here is that I see considerable value in involving practitioners who have a detailed knowledge of what happens and what is needed at the coal face. With the best will in the world middle managers often do not and perhaps cannot have this knowledge.

In setting up the training programmes we identified the different needs of operators, who would be responsible for entering and updating data, and users, who would want to access the system for information. We also distinguished between the respective needs of basic grade staff and middle and senior managers.

The actual content of the programmes followed naturally from the content of the User Guide, but a lot of thought was given to the way that the training was delivered. We were conscious of the fact that aptitude would play a large part in the rate of learning and that some people have an emotional block at the very mention of computers. We therefore set out to make it as non-threatening as possible - indeed to make it fun.

One of the implementation team, with no previous experience in training, took on the specific task of developing and running the training programmes, and quickly developed a style which was very well received by those being trained. In particular she tried to personalise the process and, largely for this reason, settled on working with a maximum of three people in any one session.

Operators were given a three-day training in which they were progressively exposed to the complexities of the system, and able to practice on the test system without the slightest fear of doing anything disastrous. They were also given the assurance that support would be given to consolidate on this training when the system went "live" in their particular area team.

Obviously the time lapse between training and implementation needed to be kept as short as possible, which led us to set up a rolling programme whereby the whole implementation team would move into an area office within two weeks of the local operator(s) being trained, and would play a very active part in setting the system up and getting all current caseloads keyed in. At that stage an assurance was given to the area team that the implementation team would not terminate its involvement until the users were confident in using the systems. Also a lot of good will was generated by the implementation team's willingness to get stuck in to gutty tasks like sorting through current (often inaccurate and out of date) records and keying in client details. In practice this meant that all three of the implementation team were involved in an area team for about 2 to 3 weeks, with support then dropping off to one or two members, to

allow the third member to start the training programme with the next team.

The need to consolidate on training in the operator's own work setting was, in our experience, of fundamental importance, and it was very revealing to see how often people who had coped well with the initial training just froze completely when confronted with the live situation.

Although the users of the system (social workers, team leaders, etc.) did not require the same detailed knowledge as the operators, we still felt that they needed a full one-day training, partly to give confidence in accessing the system, and partly to impress upon them the importance of feeding necessary data in the right form to their operators. The basic one-day training was the same for all users, except that middle managers received more in the way of access to management information.

Overall the programme of training and installation went extremely smoothly, with no tears, tantrums, psychosomatic illness, walk-put or verbal or physical onslaughts on the implementation team. This is not to say, however, that there were no lessons to be learned, and I think the most important of these was the need for management at all levels to play a positive and active part in the programme.

Inevitably the introduction of a new system will entail change, and will require decisions to be made on issues which might sometimes be controversial. These are clearly management responsibilities and management should, in my view, take a positive role in getting this message across. In short, the implementation team should not be left on their own to "sell" the system - they will almost certainly have enough on their plates without this!

One small example of how easily these situations can arise occurred when the decision was made not to include foster parents on the computerised client index, the reasoning being that they fall more into the category of colleagues than clients. This did not seem an unreasonable decision, but it did constitute of change from previous practice, and needless to say, did not meet with the approval of some users of the index. As a consequence the implementation team were frequently challenged on issues, such as access to information, and whether the system offered a true reflection of workloads. The tempting response was to say "don't ask us, ask them (management)" but, as "they" were seen as the instigators of the new system the only effect would have been to undermine the credibility of the system. If this situation is multiplied a few times, then you have an implementation team which feels continually on the defensive and likely to develop something of a siege mentality. The message for me is simple - management need to be *actively* involved throughout the project.

Approaching the end of the implementation stage it is tempting to believe the task is almost finished - whereas I would argue that there is still a substantial job to be done. In the euphoria of a new system which, hopefully, is a major improvement on the old one, it is easy to overlook the steps which are necessary to ensure its viability. Indeed, if the system being replaced has got into a mess (and this is often one of the reasons for computerising), it could be instructive to look back at the reasons for this. Among them will probably be found things like:

failure to observe basic disciplines;
inadequate instruction;
inadequate supervision;
poor communication.

Computerisation, in itself, will not remedy these short-comings, although the

introduction of a sophisticated system should provide sufficient reason to address them and, unless sufficient attention is given to this, I suggest that you might wake up one morning to the realisation that all that has happened is that a manual shambles has been replaced by a computerised shambles.

I am, therefore, making a strong case for adequate attention and resources to be given to what we have termed the backtracking stage, which should give particular attention to the following areas:

1) Are the data which have been entered during the installation phase accurate and complete? The chances are that in the process of transferring a substantial volume of records from a manual system to a computer system certain things will be overlooked. It is worth going back when the dust has settled!

2) Are the basic disciplines in terms of procedures, accuracy and timing being followed? Is the line management/supervision structure adequate and sufficiently well informed to ensure this?

3) Have the respective offices been weaned off a dependency on the implementation team?

4) Are training routines established to ensure that new staff are properly trained, rather than "picking it up as they go along"?

5) Are procedures and guidelines too open to interpretation to give meaningful statistics: e.g. do all social workers/teams use the same criteria when deciding to close a case?

6) Is the system coming up with the goods as specified at the outset?

I realise that I have interpreted my brief to address the subject of training rather liberally. I do sincerely believe, however, that in a project of this nature, training cannot be considered in isolation, and I hope that our experiences and these observations will prove helpful to others embarking on a similar course.

The author is Training Officer for the Highland Region Social Work Department.

INFORMATION SYSTEM DESIGN

Mike Gunn

My aim in this paper is to suggest and discuss an agenda of items which need attention in the design of a new information system. Each sub-heading represents an agenda topic and my comments seek to provide practical guidelines.

Aims

The first major step in any system design project is to establish the aims and objectives for the system. Individuals will have their own objectives and it will be essential to collate these views to achieve a consensus of agreement. It will be necessary to review the objectives as the project develops, circumstances change and requirements alter, perhaps as changes to legislation or departmental policy are introduced. A project which has no firm agreement on aims and objectives will drift from area to area and gradually move the project away from the originally conceived idea.

In some instances it is very necessary to develop into new areas, and will prove beneficial to the overall project: the skill is knowing when to return to the original set goals, leaving the new areas to form a 2nd and 3rd phase.

Part of establishing aims and objectives is to enable you to determine why a new system is required. Is it because it is a "hobby-horse" of an individual? Does it have departmental approval? Will it be supported by both management and workers? Just why has this project received the green light? Whilst determining the aims and objectives use your own knowledge, and that of the experts, to determine the pressure points against which the success or failure of the project will be measured.

Project Team

When establishing a project team to assist in the design of an information system great care must be given to the selection of the members. The team should be as small as practicable, since large teams are difficult to control and steer. It is much better to have a small core of people supplemented by specialist staff than a large unwieldy group. In the selection of the team it is essential to recognise people's motivation in relation to the project, and some of the roles they may play, including:

Champions - people who will fight for the system, believe absolutely in it, and work hard to achieve success.

Supports - people who will assist the project by supporting its aims and goals without detailed knowledge of the project.

Assassins - persons who do not believe the system will be successful and may actively try to make the project fail, either by direct or indirect action.

Leaders - individuals who have good leadership skills, who will ensure the project is successfully completed.

Most successful project teams will have a mixture of the above people in them.

The team as whole must be persistent to complete the job, be unselfish in that they actively share ideas and power, and be willing to accept that although perfection is ideal it is not possible to achieve in practice. However the project is likely to fail if the team consists mainly of "superstars", who work well in isolation but will not share knowledge or offer help to other team members, or of "technical" people rather than end users.

Logical Thought

Try to be logical in your thought processes and the manner in which you tackle the various tasks. Take time to prepare for the necessary interviews and discussions. Draft out an outline of the questions for which you need answers. Research the existing systems in advance of any discussions with individuals, so that you are confident you have an understanding of how the system operates. This in turn will build the confidence of the potential users, that the time and effort invested with you will produce a system which will work for them, and one which they are proud to be associated with.

Compare each end user's need for the system and look at it as a whole. Question whether the practitioners will have to provide additional information to satisfy the administration and managers' needs, or whether clever manipulation of the data base can the capture one standard set of data which will meet the total needs of the department.

Do not be biased at any time during the design stage. If you are a practitioner or an administrator or a manager, always consider the other person's viewpoint, otherwise the project will without doubt

fail. Although we may not like it, a modern social services department cannot survive without practitioners, administrators or managers.

Timescales and Goals

When the major elements of the project have been defined the project team will have a greater understanding of the necessary work involved to achieve a satisfactory solution. In turn this information will enable the setting of realistic time scales and goals. Remember that it will be necessary to discuss each segment of the project with the experts currently operating the existing systems. It will also be necessary to question their methodology and the ways they have sought to incorporate the overall objectives of the policy makers.

For the system to be seen to be successful it is essential that the finished product is delivered and working by the agreed date. I am sure we have all had the same experience of ordering goods and being told 6 weeks delivery, and still be waiting after 8 or 9 weeks, creating great customer dissatisfaction. On the other hand if we are told 9 weeks and we receive it in 8 weeks, we are delighted.

When setting project time scales remember to include a contingency to ensure that unforseen problems such as non-availability of staff, key persons leaving, etc., will have only a minimal impact on the life of the project. Regularly review progress and if delays have occurred, consequentially causing time scales to slip, ensure the appropriate personnel are aware of the slippage, the reasons why it occurred, and what is being done to correct it.

Consultation and Ownership

Much of the early stages of any design project is determining from the experts of the current systems what they require of future systems, as well as how current systems are used. This requires a considerable amount of consultation. However, do remember that although they have extensive knowledge in their own field and may know what is required of existing systems, they may not have the vision to state what will be needed for the future. Similarly they may have very detailed knowledge of their own area but absolutely none relating to the overlapping system.

Consideration must always be given to the question - "Does the expert know best?" In relation to an information system, for example, a good computer programmer could produce extremely sophisticated programs, with very complex front-ends, which non-computer aware staff would be totally incapable of operating. In terms of the computer programmer, the system is very successful in meeting all of the objectives: however, in the terms of the end-user the system is a disaster because it is unusable.

As the system is developing, demonstrate the prototype to the experts and future users of the system to ensure that the project is on the right lines, and that all parties approve. This approach will ensure that the future users of the system accept ownership of it, and that they have contributed to its design, which in turn will ensure a smooth and successful implementation, and help to eliminate the assassins of the project.

Existing Systems

When undertaking the fact finding stage, ensure that the information gathered is critically analyzed. Question the validity of the methods, what the data is used for, and why is it needed. Don't just computerise a system because it is there! In my old local authority some information

had been gathered manually for years because a councillor had once asked a question which the department could not easily answer. Thus the collection of this data was established and became the accepted norm. It was only when the procedure was critically examined, due to computerisation, that it was realised that the data had no value. Many of the systems we accept as normal working practice have developed in this way. In addition do not be constrained by the fact that working practices have always been operated in the same way: now is the opportunity to develop improved methods with benefits for all.

Innovation

After completing the fact finding exercises of the project the stage is reached where solutions will begin to formulate in the minds of the project team, and it is here where creative thought and ideas will naturally develop. These creative sessions should not be stifled, as it is one of the most important stages in designing a successfully system. The most successful technique I have used is brain storming, where all solutions, however impractical, are noted and it is only afterwards that the practicalities are considered.

One of the most important things to remember is that the system will be used by staff with little or no computer awareness, and therefore to be successful it must be useable by the end-users; it must therefore be very practical and very easy to operate. Although the majority of us would wish to be innovative, it must be remembered that too innovative an idea will heighten the risk of failure, for example by adopting untried and untested technology.

Summary

In summary I believe that the use of the aspects I have briefly outlined when designing an information system will greatly improve the chances of success. I do not believe that there is a magic wand which will ensure success, but that it requires hard work, dedication and above all the right attitude of mind. I personally find the design, development and implementation of systems extremely interesting. Seeing the dawning of realisation on people's faces that the system delivers what was promised is for me highly motivating.

The author works for ICL but states that the views he has expressed are his own and not necessarily those of ICL.

PERFORMANCE INDICATORS AND DEVELOPMENTS IN PERSONAL SOCIAL SERVICES INFORMATION SYSTEMS

William Warburton

Introduction

In this paper I begin by focusing on the development of performance indicators (PIs) for health and welfare services. Then in some detail I describe the Key Indicators (KIs) of local authority social services that have been developed by the Social Services Inspectorate (SSI). I conclude by using the issues that have emerged in the work on KIs to offer some thoughts on the development of Personal Social Services (PSS) information

systems. To set what I have to say in context, we all need to bear in mind the conclusion reached by Sir Roy Griffiths that local authority (LA) PSS is run without adequate information to inform the necessary decision making. He spoke of private companies going into "merciful liquidation" if they ever ran their affairs in a similar fashion.

Performance Measurement and PIs

History/actors: Performance measurement and PIs have been to the forefront of central and local government concern and activity for some time. The importance of performance review was boosted in the early 1980s by central government's Financial Management Initiative, and the establishment of the Audit Commission. Since then the related concepts of VFM (value for money) and the three Es (economy, efficiency and effectiveness) have become part and parcel of service evaluation. Key actors in developing performance measures/ indicators for health and welfare services have been the Health Service Information Division of the Department of Health (DH), the Audit Commission, certain LAs who have introduced their own "performance monitoring" systems, the Social Services Inspectorate (SSI) of DH, Social Information Systems (SIS), and the Social Services Research Group (SSRG). In Scotland a set of indicators is under development by the Social Work Services Group, using data provided in LA planning statements.

Performance measures are often confused with PIs. Although the two are linked they are separate. Performance measures directly measure what services are being provided, to whom and with what impact. They are usually based on sophisticated data. PIs are not necessarily direct measures, rather they *indicate* how well services are being delivered and with what result. They are usually based on cruder data or proxy measures.

In this paper I shall focus on PIs. DH in introducing their Health Service Indicators gave a useful definition of PIs: "they provide pointers to areas which appear to merit further investigation. They enable managers to compare their services with those of others". In similar vein, SSI believes that its KIs provide a starting point for the inspection/ evaluation of services. SIS add the reminder that PIs are not meant to provide an exhaustive account of every nuance of every case nor every aspect of service provision.

What PIs should measure: PIs collected by central or local government should ideally provide information on PSS inputs, outputs, and outcomes. Often *outputs* and *outcomes* are confused. Outputs relate to what is being produced (i.e. number of meals-on-wheels, number of home help hours, etc.). At best outcomes include the impact of outputs on service users' lives. Outcomes can also relate to the match between targeted and actual performance. PIs are also required to provide information on the processes and management of service delivery and on the numbers and types of people consuming services.

Additionally, PIs should provide information on *economy* (i.e. the acquisition of inputs), *efficiency* (i.e. the translation of inputs into outputs) and *effectiveness* (i.e. the translation of outputs into outcomes).

Necessary conditions for generating and using PIs: PIs ought to be *derived* from PSS policies and objectives, and serve as a check on their realisation.

PIs should be part of the *process of good*

management and their production and analysis should be linked into systems for action. They may raise the right questions, without necessarily supplying the answers, as PIs are usually best used as starting points for evaluation. In order to get at some of the answers, PIs should be *part of a broader review process,* including more detailed qualitative exercises that encompass outcome measurement in some way.

Turning to the *data* on which PIs are based, they need to be up-to-date, reliable and capable of being routinely collected. PIs can be enhanced if individually or as a set they integrate data from different sources.

When PIs are *interpreted and analyzed,* they need to be examined in the light of data and knowledge about local policies and other factors including local needs, current levels of provision, and the provision of other agencies. In other words, they should be examined in context and as sets of indicators. Analyses of single indicators will rarely prove profitable. In this way, PIs should be examined by reference to "frameworks" or systematic analytical paths (such as those that appear in the KI Demonstration Package (KIDP)).

Outputs from PI systems can be *targeted* at different staff groups, although it is best to be clear which groups are being targeted when PI systems are being set up. Once set up PIs need to be accessible, relevant and useful to the targeted groups.

Criticisms: PIs and the authors of PI systems have been criticised as often PIs focus only on what can be easily quantified, and do not include measures of outcomes and quality. PIs are criticised as too broad-brush, too crude and overly financial. Data used to construct PIs are often (rightly) said to be historic and patchy (in terms of their coverage). Perhaps the biggest criticism is that PIs are often linked with cost-cutting, rather than service developments, and that low/high PI values are too readily equated with either "good"/"bad" practice.

PIs usually are used to compare one LA's services with another, or to compare one health district with another. Some managers think that inter-authority comparisons made in this way are not useful as local situations may be so different that like is not being compared with like.

These and other points were made to SSI as it field-tested the KIs in late 1987. I shall come back to them later.

Analytical frameworks: I have said that it is important to analyze PIs within context. The Audit Commission provide such a context in their annual Profiles of LA services. Their famous "tree" diagrams allow LAs to see if, why and how far their spending on a particular service is out of line with like authorities.

Both SSI and SSRG have frameworks that spell out the importance of considering, say, local needs and policies when constructing and analyzing PI systems. In the KIDP, as I have said, there is an analytical framework. This framework both identifies the different types of indicators and makes links between them. This model, albeit theoretical, helps users of the KIDP to see and use the KIs in context.

The KIDP framework also assists with the identification of which service areas or issues are not covered by KIs, and of which types of KI (such as service intensity and turnover indicators) are too few in number due to a lack of appropriate national data from which they can be constructed. This can lead to efforts on the part of both

central and local government to fill these gaps. It also implies that where national data are not available to construct the KIs, then LAs should use their own local information to supplement the KIs. This information can be in the form of hard data or softer data on such things as policy statements or impressions of the extent to which services are meeting need, and so on.

Key Indicators

The development of KIs: I would now like to turn to the development of KIs by SSI. In December 1988, SSI released the KIDP to Directors of Social Services in England. This package contained tables of KIs based on 1984/85 data plus papers outlining the reasons for the work, the uses and limitations of KIs, and methods for their analysis. In March of this year, DH's Statistics Branch, SM16, released an update of some of the most important KIs using 1986/87 data. More updates are in the pipeline. The release of the KIDP and the updates for 1986/87 marked the end of the first stage of the development of KIs.

KIs have been developed by SSI in conjunction with SM16, and in consultation with the LA Associations. SSI was keen to undertake the work as it was thought that a comprehensive set of national data - brought together as KIs on all LAs - would greatly assist it in its inspection and development work. It soon became apparent that there would be and *should be* benefits to others, particularly LA social services departments (SSDs). But more of that later.

SSI believe that KIs make the best possible use of current national social services data that are collected on a LA basis. They include indicators of social services inputs and outputs, and processes. By the same token KIs are limited by what is currently collected nationally. For this reason, they include no measures of quality and no direct outcome measures, as data on these two important aspects of service provision are not readily available.

So using national data sources, such as DH's own statistical returns, the revenue out-turn data collected by the DOE, and CIPFA's "Actuals", KIs were constructed to integrate data on staffing, activity and expenditure.

In the first instance KIs have been produced on services to elderly people and services to children, although there are a number of general service indicators covering staffing and expenditure. KIs on other client groups will be produced in due course.

There are 155 KIs in total. Typical KIs are the number of children in care per 10,000 population aged under 18; the number of LA residential care places for elderly people per 1,000 population aged 75 and over; the gross cost per child day for LA day nurseries; the percentage of gross current expenditure on home help services recouped through fees and charges. Nothing mysterious here; in fact, the kind of statistics that have featured in many a report to a local social services committee, and some of which are included in the detailed feedback and LA profiles of social services data released by DH. Furthermore, almost all of the data used to construct KIs is in the public domain, and the rest is available with a bit of digging around. SSI, being part of central government, was well placed to bring all the data together; whereas others might have had a hard time to assemble similar data.

In developing KIs, SSI found it useful to distinguish between Prime KIs and Support KIs. Prime KIs are meant to provide an overview of, and an immediate and accurate way into, the tables of data.

They form the core of the KIs, and there are 46 of them. The Support KIs provide additional and explanatory detail in support of the Prime KIs. KI tables in both the KIDP and the Updates show the actual and percentage changes between 1984/85 and 1986/87 of each Prime KI for each LA.

There are limitations in using KIs, and these must be clearly recognised and remembered. I have already touched on some of these. Essentially KIs are crude and broad-brush indicators of LA PSS activity. They are based on nationally available data, and do not cover service quality and service impact. They provide pointers to the effectiveness and efficiency with which services are provided. But they raise more questions than they provide direct answers. Because of these limitations they deliberately were not called "performance indicators". Rather, KIs both provide a *starting point* for service evaluation and a basis for discussion between, say, SSI Regional Inspectors and SSD managers.

KI field tests: Before the KIDP was finalised field tests were conducted in six SSDs towards the end of 1987. Doubts about the usefulness of KIs in particular and national social services data in general were expressed by SSD managers. These doubts centred on three major issues: different LAs complete the national returns differently; feedback of national data comes far too late; and there are gaps in the national data. On the first point, SSD managers expressed concern about the different interpretations that different LAs have of the data being asked for by the DH, DOE and CIPFA, which casts doubts on the inter-authority comparability of some data. An independent study carried out as part of the field tests confirmed that a number of data items were not reliable for this reason. This is an added reason for caution when using KIs comparatively.

The tables of KIs in the Demonstration Package were based on 1984/85 data, as when work commenced on the KIs in 1986 these data were the most recent. Considering that the KIs in the KIDP were released almost four years after the end of the financial year to which they relate, it comes as no surprise that both SSI and SSDs are reluctant to place too much store on the data. The Updated Prime KIs - released in March 1989 - relate to 1986/87. This is better, and within DH there are plans to improve the turn-round of the data it collects. The field tests corroborated the view that SSDs would welcome more recent data. Interestingly, principal causes for the slow turn-round of national data are the late return of forms by some LAs, and major inaccuracies on the forms of others.

Some major service areas are not covered or are only partially covered by the current sets of national data. The field tests confirmed this as a cause of concern to SSD managers when they came to use national data. These service areas include social work and domiciliary services. In addition, there is a time-lag between innovative services being introduced, or existing services being modified, and data being available on them. As a result, the current national data do not do justice to new services such as family centres. However, the new DH return on residential care for adults, RAC5, does indicate the changing use of residential care homes to incorporate day care.

These issues raised or confirmed by the field tests need to be addressed if KIs are to be used most effectively at both local and national levels. Progress within DH has already been made in dealing with some of these problems. A number of the reservations expressed during the field tests about DH's own social services data referred to the data collected in 1984/85.

As part of their rolling programme of review, SM16, in conjunction with the LA Associations, have already amended a number of their forms and introduced others to cover some of the gaps and to clarify definitions and coverage. More improvements are in the pipeline.

All this, however, does not mean that we should not use existing KIs until these problems are resolved. The current KIs contain far more straightforward and familiar items than complex novel items. They contain far more items that are based on reliable data than items based on unreliable data. Encouragingly, the application of KIs to a recent Inspection has shown a high degree of congruence between the broad brush KIs from 1986/87 and detailed data collected on site in late 1988.

One further issue raised by the field tests should be mentioned. SSI came to the view that SSD managers had much information at their fingertips. This information included data produced by each SSD's own research and information sections plus the national data supplied by, for example, DH and CIPFA. Yet managers did not fully exploit these data, to inform thinking on either strategic matters or specific issues.

KIs: useful to whom? From the original idea of producing a set of indicators for SSI's own use, the KI work is now expected to fulfil a number of functions and be of use to both DH and SSDs. KIs can assist:

1. **SSI**
- in its overview of PSS;
- to select issues and agencies for inspection and development work;
- as a starting point for inspection activity.

2. **Department of Health**
- to monitor service provision within LAs over time;
- to identify gaps in current data;
- to understand better the links between PSS inputs and outputs;
- to inform Ministerial briefings on specific issues.

3. **SSDs**
- to monitor their own provision and that of the independent sector over time;
- in their strategic planning;
- to set and evaluate their own provision in the context of the provision of like local authorities;
- as a starting point for internal service appraisal.

Links with other work on indicators

Each year the Audit Commission produces Profiles for each LA. These are based mainly on CIPFA estimates and cover all LA services. SSI and the Audit Commission - aware that they are fishing in the same pool - are involved in joint discussions, as they have a common interest in producing the most reliable indicators possible. An early result of these discussions is that the Audit Commission are to add to the number of indicators and data items derived from DH statistics that appear in their Profiles.

SSRG have also been working on indicators of LA social services. Unlike SSI, SSRG use the term "performance indicators". In some ways their work has followed a path similar to the KI work. However, the SSRG work is broader than the KIs. Whereas SSI only identified KIs that could be constructed using national data, SSRG identify PIs that require the collection of more detailed information of both a qualitative and quantitative kind. Such information might be gathered as part of local management information systems or through once-off research exercises. SSI's KIs and SSRG's PIs are not alternative products competing for the same market. Rather, the national perspective shown by KIs needs to be complemented by the local data that SSRG are proposing, and vice versa.

A few words need to be said about the link between KIs and the overall data set that DH collects. For some years DH have been providing management information in a variety of forms to SSDs based on the data supplied by LAs. Basic input returns are designed jointly by DH and LA representatives so that these returns can be used as management information documents within the LAs. A feedback service is provided by DH giving trend data for particular services. LA Profiles are also produced giving very detailed information, including comparative indicators over time. Basically, the KIs draw from all this material, selecting the most important indicators.

DH Strategy for KIs, 1989/90: Following a review of the KI work in October 1988 with the LA Associations, DH began to plan for future developments. With the release of the KIDP and Updates for 1986/87, a new phase in the KI work has begun. To shape this phase, DH has formulated a strategy for 1989/90. In line with the wishes of the LA Associations, the overall objectives of the strategy are to keep the KIs as up to date as possible and to make them more accessible, relevant and useful both to DH and to SSDs. The strategy also addresses some of the issues raised by SSD managers during the KI field tests. The main elements of the strategy concern:

a. **Updating and production**: updated KIs - for 1986/87 - have been distributed to SSDs. Forms of graphical presentation will be explored. Ways of speeding up the turn-around time of data collected by DH are being considered. Investment in new technology will assist SMI6 in getting data analyzed and fed back to LAs more speedily, and it is hoped this will encourage LAs to play their part in returning completed forms more accurately and in good time. The publication of KIs will not be delayed to wait for late LAs - provisional or substituted figures will be used for these LAs, to be updated in later versions.

b. **Reviewing KIs**: there will be a continuing process of reviewing the relevance of existing KIs and assessing the need for new KIs.

c. **KIs to support SSI's Inspection Programme**: SSI is making use of 1986/87 KIs in support of its Inspection Programme. For example, KIs have been used successfully to provide an LA-wide context for quantitative and qualitative data collected as part of an inspection of public sector residential care. More applications are planned.

d. **Popular articles**: popular articles will be provided for the trade press and/or for direct distribution to the SSDs.

e. **KI Workshops**: regional workshops for SSI Inspectors and SSD staff, including line managers, will be held in 1989. The workshops will provide an opportunity both for dissemination to the field, and for feedback from the field on how the data could be improved.

f. **Expert systems**: the most ambitious and innovative part of the strategy is the construction of a PC-based expert system for the KI data, such as the expert system that is operating successfully with Health Service Indicators. Such an expert system would allow the KIs and related data to be analyzed and written up in systematic ways using built-in "rules" and paths of analysis. A prototype expert system will be developed and tested within the Department before outputs from it are made available to SSDs towards the end of this year and in early 1990. These outputs will comprise textual reports comparing individual LAs with appropriate groupings of similar LAs. The expert system being planned will cover residential care for elderly people, home care, children in care, and day care for under 5s. Within each subject area, it is likely that the expert system will focus on a number of key issues, rather than be an all-purpose way into the KI data.

g. **Departmental monitoring**: KI data should help DH Policy and Finance Divisions to monitor PSS over time, so that they can be better equipped to identify issues and consider action. The data should also inform Ministerial briefings on specific issues.

PSS Information Systems

SSI point of view: Through the KI work and its on-going contact with the field, SSI has come to an appreciation of how, in

some major aspects, PSS information systems need to develop. The systems that I have in mind are those operated by LAs, although much of what I have to say can relate to systems run by others, including central government. I would like to conclude by drawing on this appreciation to sketch out a number of implications, to suggest certain developments and to sound a few warnings for the future development of PSS information systems. Although some of the implications may seem self evident, many working in the information field have been slow to see them and react to them. *It should be stressed that the following points do not amount to a DH view, but rather reflect current SSI thinking.*

Implications and developments: When setting up information systems, both the commissioners and designers should be clear about the target audience for whom the outputs are intended. For example, KIs are intended to address specifically issues of relevance to senior and middle managers. Information systems that strive to meet the information needs of all potential users can take a long time to design and operate, and can end up by satisfying no-one.

Taking social services managers as the target audience, a related point is that information systems should be capable of arming managers with the information they need to manage. This means discovering from managers the key decisions they take, and setting up information systems to provide the information needed to help them reach these decisions. This comes back to the central point, that information that does not relate to current policies, objectives and targets can be largely irrelevant.

Data for information systems need to be collected, analyzed and fed back relatively painlessly and speedily. Often much more information is collected than ever can be used; and moreover, much of this seems to be collected "for the record" rather than for use. To turn this round, the aim must be to get information into and out of information systems in time for managers to be able to use it. Related to this point is the further consideration that information systems need to feed into management decision processes in explicit ways, so that the production of information is linked into systems for taking action - remedial or otherwise.

Frameworks for analysis need to be built into information systems. It is best to have ideas of the types of data (eg. inputs, outputs, services processes, outcomes, data on level, cover, intensity, turnover, and so on) that are required, and how these data are to be analyzed, before any data are collected. This approach might lead to more appropriate data being collected in the first place. The KI analytical framework offers a comprehensive model of the kinds of data that need to be collected and how data analyses should proceed in the first instance. LAs might consider using it, or the similar SSRG model, when planning their own information systems.

While some critics of KIs say that the KIDP contains too many financial-based indicators, and not enough indicators of outputs and outcomes, it must be recognised that financial data is an important ingredient of PSS information systems. It would be irresponsible if no attempts to collect cost information on different service outputs and outcomes were made. Locally, this means that SSD staff should work alongside LA accountants and finance officers when setting up PSS information systems.

Information systems need to incorporate or link with data on how services impact on clients' lives. National data on such

outcomes do not exist; local data on outcomes are thin on the ground. True there are methodological problems in collecting reliable outcome data, but there is much that could be done locally. Simple surveys of service users, such as home care clients, elderly people in residential care, children in care, and so on, would not be so difficult to stage at regular intervals. Data from them could complement indicators and other service measures.

While there must be more willingness to use indicators rather than direct measures, care should be taken to ensure that the indicators are valid. That is, they should indicate what they are set up to indicate. Quite simple indicators are often used to make inferences about major policy matters. Some indicators may be robust enough to be used in this way, but others will not be so robust.

Despite the reticence of some of the SSDs in the KI field tests to acknowledge the usefulness and place of inter-LA comparisons in service appraisal, a comparative approach conducted with adequate safeguards, can be revealing and rewarding. Thus information systems need to be capable of storing/collecting and analyzing data on a range of PSS authorities. This can apply not only to national systems but also to local systems. Individual local authorities need not collect their own hard data on other authorities. Instead they can use, for example, the KIs or CIPFA data.

However, as I have stressed, PIs and information in general need to be understood in context. This is particularly true when inter-LA comparisons are being made. This context includes local policies, differing needs for PSS, the extent to which other agencies provide services that substitute, complement, or in some way affect PSS provision, and so on. Information on these aspects can be integrated into information systems in a variety of ways. However of all these aspects, it is extremely important for both central government and PSS authorities to bring together health and PSS data so that common services issues can be effectively analyzed. In the KIDP there was a modest but successful attempt to bring data together on health districts and local authority areas, despite the lack of co-terminosity between some of them. More work along these lines needs to be done. Locally it can start with more sharing of data between health districts and SSDs.

There needs to be training to assist SSD managers in how to get the best out of the data that their research and planning sections are collecting. Equally, these researchers and planners need sensitising to the types of data presentations that managers can most readily understand and use.

Warnings: And now for two notes of caution. Current moves to decentralise services could leave national and local information systems in some disarray. In England those collecting data on a national basis, such as DH, sometimes have difficulty in getting back statistical returns from the 108 local authorities. With decentralisation and neighbourhood offices running must of their own affairs, including the production of service information, this problem is likely to be exacerbated.

Moves by local authorities towards contracting out services and competitive tendering should be accompanied by requirements for those to whom the provision of services are contracted out to supply information on the services being delivered. Without such requirements there could be serious information shortfalls facing both local authorities and central government.

Concluding thoughts: Finally, the introduction of new technology has made so much possible. In the field of PSS we seem to have lagged behind the private sector and other parts of the public sector in the application of this technology. Developments across the country have been patchy and often piecemeal. An explanation for this could be a reluctance of social services managers and professionals to grapple with PCs. A more likely explanation is the fundamental reluctance to base the management of PSS on sound and routinely and reliably collected data. This reluctance has been around for as long as I can remember, and possibly this needs tackling before we can ever use the new technology to its most telling effect. All of which brings me back to the point from Sir Roy Griffiths about "merciful liquidation".

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COMPUTERISING CLIENT RECORDS

Bryan Glastonbury

Looking back over the development of social work agencies since the late 1960's, it can be seen that client records have their origins in two applications:

1. A card index which gave the agency or a local office an overview of the client load and specific contact information (such as the name of the agency's worker and the client's address). The size of the card restricted the the amount of data placed on it, and the need to make comparisons between cards led to contents being standardised.

2. Case files on each client, which served as a detailed record of the client's history and the interactions between client and agency. There were no physical limitations on contents, so case files are often very large, and are viewed as unique records.

The computerisation of client records was not, for the most part, based on a review of recording needs, so much as on certain specific requirements, including the need to be able to provide composite analysis of (initially) card index data for annual returns, and to cope with the sheer scale of card index systems in the large agencies formed from reorganisations in 1971 and 1974. Early computerised client records were, in consequence, generally located centrally and based on the card index system, and this has continued as the dominant arrangement.

The positive in this situation is a client record system of considerable size, well in excess of the potential of the most sophisticated card index, which can usually be analyzed to provide a great variety of composite material, and with much more data on each client than could be placed on a card. Most such systems now offer on-line search facilities, so that staff in local offices can check on the agency's knowledge of a client, and on the range of provisions offered. SOSCIS is the best known example. The negative in these developments has been the lack of progress in computerising the second (and larger) form of client information - the case file.

This paper will address two themes related to the way client information systems need to move forward. The first starts from a backward look at the way computerisation has taken place, to see how far systems can and have changed to meet the tasks which they ought now to be performing. The second theme concerns case files, and looks at the arguments for and against making a major thrust to computerising them. Put another way, the first theme asks how effective existing client records are as *management information systems,* albeit with some valuable spin-offs for front line staff: the second asks whether it is now time to move the developmental focus onto the *information needs of front line staff.*

Computerised Client Records for the 1990's

Functions: as already noted, card index based client records have traditionally served two purposes, to provide the cornerstone of a statistical overview of the agency's workload, and to give an outline of each client's services and circumstances which can be accessed from front line locations. In recent years there have been demands for the system to serve more complex and challenging needs. The notion of statistical analysis has been replaced by those of *interrogations* and *reports.* Many early systems were not unlike programs for survey analysis (for example, SPSS has been used for client records), but these did not permit the depth and immediacy of analysis which is now essential at all levels in the agency hierarchy. In particular, the need for careful accountancy and *value for money* tests, coupled with a growing trend towards the devolution of budgetary and resource responsibilities to localities, has generated information demands of considerable sophistication, both at HQ and in local offices. The most up-to-date computer systems are likely to use features of *structured query language* (SQL) to facilitate these activities (an example is Hampshire's Oracle based system).

Front line staff also have to pay careful attention to the management of their workloads, so should have reason to make good use of the interrogation and report generating strengths of modern systems, especially those which have extended their coverage of individual client data. However, such staff are looking for something more than this to justify the time and resources taken up by computerisation, and should be able to find a range of *action supports* to help with assessments and interventions. These are perhaps less comprehensive than the detailed decision support we eventually hope to gain from specialised expert systems, but are nonetheless valuable, for example in drawing attention to the approaching date for a statutory visit, linking up assessment conclusions with the availability of suitable resources, costing interventions, or signposting clients where there is special risk or concern.

Content: to achieve such functions the content of client systems has been gradually increased, most openly in the volume of material now available on clients and resources. This much is obvious and observable. More subtle, but also more important, is the value of employing file contents in seeking to change the strategic usage of the system. Traditionally client files have been used retrospectively and with little regard to their dynamic potential. They show a picture and analysis of what is and was (this is the nature of annual statistical returns, or workload distributions). While this approach remains essential, modern systems can also be used in a much more forward looking and predictive manner, to project overall trends (the best established

predictive tool), anticipate outcomes of service interventions, and give a precise statement of the commitments which past and current actions imply for the future.

System Structure: another potential strategic development concerns the way the computerised system is structured to meet the needs of different levels and locations in the agency hierarchy. Early systems were centralised, possibly through some recognition of the importance of improving information facilities to senior agency management, but more often because they were formed on a centrally located mainframe computer. Technology and software now support system structures which can closely parallel organisational structures, through networks working either to a central server, or to locally based information stores. It is no longer necessary or even desirable to hold all data in a central location, but more fundamentally it is now feasible to take a selective approach to the overall information store, segmenting it according to where and how it can best be used. Why, for example, clutter up the HQ system with client details which are only needed by front line staff, and which, if held in some vast single data base, increase the risk of system crashes and slow down system response times? The issue of system structure and location becomes increasingly important as the amount of data held on computerised client files gets nearer and nearer to the content of case files.

Presentation and Maintenance: something learned from experience is that if client records are to be used effectively and willingly they must be accurate, up-to-date and *user friendly*. Much scathing criticism was and sometimes still is levelled at client records for failing to meet these standards. In part this can be put down to the greater expectations that we have of computerised as compared with manual systems, but some blame must also attach to unreliable programming, limited recognition by front line staff that *they* are responsible for much of the accuracy and topicality of data entries, and management's excessive focus on data entry and analysis, rather than the overall process of data turnover. None of these problems is likely to vanish entirely, though several factors have brought about improvements - training courses designed to spread across departments the way to make computer records work effectively, the emergence at local level of staff (mainly clerical) with a detailed knowledge of how to operate the system, and probably most important the growing role played by departments' own systems developers rather than those from an external data processing service.

The vital change in presentation has been in the design of computer screens, and the extent to which they have managed to move away from coded material, and hence dependence on coding books to interpret what the computer is displaying. Where codes are employed, simply to permit a more dense presentation, on-line decoding screens are now becoming more common.

Security, Client Access and Data Transfer: this is a major topic, to be acknowledged but not tackled here. Broadly speaking, the policy of the government and local authorities towards data security has been to acknowledge that *authorised* access to personal data will be available to relatively large numbers of people, so that the concept of privacy is not assured, and compensation to the subjects of personal data is that they can join the numbers who are able to view it. In short, the message to the client is that your circumstances will not be kept very confidential, but at least you can see most of what is held on record. In practice it needs to be noted that clients have not chosen to make much use of this

opportunity. In a wider sense it is probable that the sorts of professional attitudes which social workers and others have about client confidentiality will extend to the computer records, and these will not be used in unauthorised or unprofessional ways: but there are loopholes, a significant one being the interface between information systems, where control of data is lost as it is transferred to another agency or service.

Computerising Case Files

For and Against Computerising: is there any convincing argument for seeking to replace traditional manila folders with computer files? From an organisational viewpoint there are several - the costliness of the duplication involved in maintaining both manual and computerised records within an agency is calculable, and must increase as ever greater chunks of client data are computerised. Manual files have been shown to be flawed in several enquiries, and are not designed to provide the action supports needed for today's social services. Many social workers have been able to keep a distance from the computerised system because of their reliance on manual files, and this has caused a communication block. Manual files can also be frustrating from a manager's viewpoint because of their inadequacy as a basis for monitoring work or asserting accountability. Overall, the managerial interest would undoubtedly be better served by a computerised system, even though manual records could not be entirely discarded (original documents, such as court orders, would have to be retained).

The situation is rather different from a professional viewpoint. It can be argued that computer files can never have the uniqueness, flexibility and specificity of case files. A good argument can also be made for not clogging a computer data base with thousands of words of free text. The guts of the professional issue, however, ought to surround the purpose of case records, and an assessment as to whether computer or manual approaches best meet those purposes. This is where the core of controversy lies - in establishing just what are those purposes. Are case files a record of events in the life of the client and the contact with the social worker, whether a succinct narrative or a detailed stream of consciousness? Are they a record in the sense of being a history of contact and intervention? Are they a place to write both about happenings and the ideas and speculations of the worker? Is their uniqueness more important than their structure? If the answer to all or most of these questions is 'Yes', then there is limited point in computing, since at best the computer file is the equivalent of a word processor file - neater than a traditional file, and more open to extracting material for reports, but otherwise not noticeably different.

In contrast, is the case file a record of structured assessments and interventions, of explicitly stated objectives to be checked against outcomes? Is it a tool in workload management? Is it a route towards quality control? Is it a way of comparing the needs and services of different clients and client groups? If the answer to these types of question is 'Yes', then there is a clear argument for computerisation.

What needs to be noted is that within this debate about the pros and cons of computerisation, there is a debate about the nature of social work itself. At a crude level it is a dispute about social work as a skilled, flexible and in part intuitive task, or as a structured and perhaps rather more mechanistic form of service provision. Moving into the computerisation of case files will tend to push social work towards structure, standardisation and sensitivity

to managerial concerns of work and resource inputs.

For many years it has not been necessary to come to a conclusion about using computers with case files because the resources and technology have not been available to make and maintain the transition. However, through the 1990's the debate will cease to be academic and become real. Some computerised client systems already contain so much data about individual clients, including free text, that duplication is substantial and blatant. Further, computer case files are coming into use in North America in formats which make them acceptable to professional workers, because they allow for substantial open-ended unique material. An example is the system developed by Walter Hudson at the University of Arizona, which is different from most other programs in that it was designed from the start as a case file, and is not an extension of a file from a client information system. Hudson's approach is to offer a framework within which detailed client data can be stored and used by the social worker (or in the local office), while selected extracts can be made available for composite analysis or for transfer to the agency client information system. Clearly a requirement of any computer case file is it's ability to interface with the agency data base, while retaining the confidentiality and specificity of details.

To sum up, my predictions for client information in the 1990's have two central components. Firstly, we shall move to agency systems which accommodate client data firmly in the SQL framework. Secondly, the transfer from manual to computer case files will gather pace, though not based on extending the number of client data screens on the agency client system. Instead, I believe we will develop programs designed to meet the case file needs of social workers and other professionals, which are self-contained in the way traditional case files have always been, but will interface with the agency system, and allow specific data transfer.

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CTI Centre for Human Services - Software Catalogue

The Computer Use in Social Services Network (CUSSNet) List:

The software listed here is all North American, and represents the range currently offered by the **Computer Use in Social Services Network (CUSSNet)**. Items marked * are new to this issue. Copies of any program can be purchased for £9 for a single disk program, £14 for a two disk program, and increasing by increments of £5 for three and four disk programs. Please place orders with Bryan Glastonbury, Centre for Human Services, Department of Social Work Studies, The University, Southampton. The price includes VAT, postage and packing for the UK. Bulk or overseas orders by arrangement.

At present neither the Centre for Human Services nor the editorial staff of New Technology in the Human Services have much direct knowledge of the content of the programs, but in due course we will be offering reviews.

Definitions of software codes:

(D) = Demo - Software that highlights a product and/or gives you the feeling of how the actual product operates.
(F) = Freeware - Full working version; no restrictions on use.

(L) = Limited Use Version - Lets you examine the product, but limitations prevent continued use.
(U) = User Supported Shareware - Full working copy; you are expected to register and pay the vendor if you use it.
IBM-PC = Will run on the IBM personal computer and compatibles.
(HD) = Indicates a hard disk is required.
(C) = Needs a colour graphics card.

Note: Disks are direct from the vendor and copied with vendor permission. Thus, disks are free of computer viruses.

All disks are guaranteed to work. However, disks may get damaged in the mail. If you have a problem, do a PrtSc of the problem and return it with your disk for a new copy.

Developmental Disabilities:

AUGMENT (1 disk) - Information on augmentative communication readiness (F) IBM-PC (no copy charge).
Provides teachers, parents and caseworkers with information about a client's unique situation regarding augmentative communications technologies and provides skill building exercise and resources. Distributed free by the Texas Planning Council for Developmental Disabilities.

McDSC (1 disk) Community Residential Services Demo MIS from Micro Decision Support Center (D) IBM-PC.
This demo introduces a software package to manage community residential services for citizens with severe handicaps.

DD Connection (1 disk) - Illustrates a Developmental Disabilities (OPUS) bulletin board (D) IBM-PC (no copy charge). This demo illustrates the DD Connection, a local bulletin board and database for persons with Developmental Disabilities which is operated by the Nat. Assn. for Retarded Citizens of the U.S. Distributed free by the Texas Planning Council for Developmental Disabilities.

1-Finger (1 disk) - Handicapped Keyboard Enhancer from Trace Research & Developmental Center (F) IBM-PC.
1-Finger allows someone using only one finger, a mouth stick or a head to hold down two keys at the same time and to delay the automatic repeat feature.

Stickey (1 disk) - One finger or stick program with keylock for people using a stick access device from C-CAD(U) IBM-PC. Allows someone using only one finger or a stick to better access the computer. Also contains PowerMenu from Brown Bag Software.

* **Captain's Log** (2 disks) - Demos a cognitive rehabilitative system. (D) (C) IBM-PC.
Provides a demo of software designed to train basic cognitive functions including attention, concentration, memory, visual-motor, numeric concepts and reasoning skills. For use with individuals age 6+ with head injuries, learning disabilities, strokes, mental retardation, or to facilitate early learning. It can also be used as a pre-post drug assessment tool for attention deficit disorder. A mouse is required for the program, but not the demo.

* **Freedom Writer** (1 disk) - Demo of input program for persons with limited mobility. (D) IBM-PC.
Cursor key and scanning demo of a one key, mouse, light pen, speech, and joystick operated word processor. Demo includes HELP U TYPE, a program offering keyboard macros, word prediction, automatic spacing, repeat key defeat and one finger operation.

* **Newkey** (1 disk) - Key redefinition keyboard enhancer (U) IBM-PC.
Allows the user to assign any sequence of keystrokes to any key, to speed up input of frequently used words and phrases. Memory resident, so it works with most programs and word processors. Includes WarpSpeed which speeds up the repetition rate of the keyboard without over-runs.

* **WPK** (1 disk) - Shaerware easy-to-use large type font word processor. (U) IBM-PC.
An easy to use word processor designed for young children. Uses 40 columns and 20 row per screen mode. A 10 column 3 row per screen mode is also available for the visually impaired.

Education/training:

AMS (1 disk) - Academic Merit System - Automatic merit review process from WALMYR Publishing Co. (L) IBM-PC.

AMS is an automated merit review system for use by faculty and Personnel Committee for evaluating faculty performance.

BASIC Professor (1 disk) - An interactive BASIC tutorial from Eagle Software (U) IBM-PC.
An interactive tutorial for teaching novices how to use the computer language BASIC.

GRADES+ (1 disk) - Course grading program from Penguin Computing (D) IBM-PC.
GRADES+ tracks and analyzes the results of a single test, combines several score columns to computer a semester grade, or assigns letter grades.

SCREE (1 disk) - Sequential Criterion Referenced Educ.Evaluation System from WALMYR Pub.Co. (L) IBM-PC.
SCREE helps you create, print, score, analyze and graph test scores for one or more courses.

TAS (1 disk) - Teacher Assessment System from WALMYR Publishing Co. (L) IBM-PC.
TAS produces individual faculty reports ad overall summaries based on student responses to the Arizona State U. designed "Teaching Evaluation Form."

TUTOR.COM (1 disk) (Ver 4.4) DOS Tutor from Computer Knowledge (U) IBM-PC.
Provides 9 interactive tutorials on the computer and the basics of DOS.

* **DEMOBBS** (1 disk) - Freeware menu driven, interactive BBS (Bulletin Board) (F) IBM-PC.
DEMOBBS introduces the services provided by the NASW (New Mexico) BBS and introduces several networks, Fidonet, CUSSNet, and the Opus BBS system. User can connect to the NASW BBS using an on-disk communications program.

* **Empirical Practice** (3 disks) - Materials for a course on empirical practice. (F) IBM-PC.
Contains class notes, actual readings, homework assignments, sample exams, and other teaching materials for a course on applied clinical measurement. From Walter Hudson.

* **Examination Administrator** (1 disk) - Test administration and scoring program. (L) (HD) IBM-PC.
Program for administering and scoring a large number of "right answer" test questions to a large number of examinees.

* **MEL** (1 disk) - Demo of Micro Experimental Laboratory system. (D) (C) IBM-PC.
MEL is an experimental authoring system allowing users to run experiments by filling in blanks on forms. MEL runs the experiment and collects, analyzes and graphs the data. Students can run reaction time, questionnaire and text comprehension experiments without programming. User tutorial included. Won the EDUCOM/NCRIPTAL higher education award for best Social and Behavioral Science software.

* **PC-FASTYPE** (1 disk) - Typing instruction program. (U) (C) IBM-PC.
A graphics oriented typing tutor where you view the displayed keyboard image on the screen. Works for either the AT style or the new "enhanced" style keyboard.

* **SIMCON** (1 disk) - Shareware policy simulation. (U) IBM-PC.
Allows students to see how various actions and roles will impact on a decision to co-ordinate human service programmes.

Health:

AMIS (1 disk) - Hospital Social Work/Discharge Planning demo from King Associates Ltd. (D) IBM-PC.
AMIS contains patient registry, discharge planning, and resource management modules which provide for the timely completion of necessary tasks and the renewal of applications to continue service and entitlements and to control length of patient stay, quality of patient care and hospital cost.

Medical Rehabilitation Manager (2 disks) - Demo from Easter Seal Society (D) IBM-PC (HD).
Allows the rehabilitation professional to collect, store, evaluate and use patient data drawn at every stage in the rehabilitation process.

Vocational Rehabilitation Manager (1 disk) - Demo from Easter Seal Society (D) IBM-PC.
Manages client payroll and maintains detailed client records.

* **AIDS** (2 disks) - Hypertext shareware (U) with AIDS example (D) (F) IBM-PC.

Memory resident hypertext shareware program for linking ASCII files (1 disk). Good for creating educational programs for rapid browsing of diverse information, such as the AIDS information pack (1 disk). Order one or both disks.

Mental Health:

Agency Simulation (1 disk) - Agency simulation source code & reports for Dec 10 (F) IBM-PC.
This disk contains the source code, sample data, output reports and documentation. The simulation will run on any DEC 10 computer running Tops 10. The Community Mental Health Center simulation was developed using the language SIMULA at the U. of Washington in 1987 under a NIMH grant.

CAS (4 disks) (Ver 5.2) - Clinical Assessment System from Walmyr Publishing (L) IBM-PC.
CAS helps assess client problems and monitor treatment progress over time. Useful for counsellors who must produce outcome measures for accreditation and insurance reimbursement.

DIS (1 disk) - Demo of client self-administered Diagnostic Interview Schedule from U. of Wisconsin (D) IBM-PC.
The Diagnostic Interview Schedule (DIS) is a computerized structured interview used to obtain data required for most adult Axis I psychiatric diagnoses. This version of the DIS on this demo is designed so that the patient can take the interview with minimal assistance from the clinical staff.

Hamilton Depression Assessment (1 disk) - from Grant Fair (F) IBM-PC.
Administers, stores, retrieves, scores and prints the result of a modified Hamilton Depression Scale consisting of 19 questions.

Help-Software (1 disk) - Demo of self-help software for assertiveness, self-esteem and stress from CATSco (D) IBM-PC. This sampler acquaints you with three client administered self-help software programs. Help-Assert increases assertive communication. Help-Esteem enhances self-esteem. Help-Stress helps control and manage stress.

MMPI (1 disk) MMPI scoring demo from Applied Innovations (D) IBM-PC.
Produces MMPI data quickly, accurately, and inexpensively.

PsyMed (2 disks) - Guide to psychotropic medications from Psych Soft Inc. (U) IBM-PC.
PsyMed provides condensed indications, adverse reactions, dosage, and visual identification information for over 130 medication definitions commonly needed by Mental Health professionals and others.

*** Tests1** (1 disk) 5 tests for game and curiosity purposes. (UF) IBM-PC.
Tests to use as games and to illustrate test computerisation and how programmers handle the test/user interface and data presentation. Tests cover assertiveness, depression, locus-of-control, sex role identity, and a Myers Briggs lookalike.

Management:

Bernie Cares (2 disks) - I&R demo from Central Referral Service, Inc. (D) IBM-PC (HD).
Illustrates the Bernie Cares information and referral system designed for an I&R agency.

Community Services Locator (1 disk) - I&R demo from Pinkerton/Galewsky (D) IBM-PC.
Illustrates The Locator which tracks caller activity, maintains a program database, searches and retrieves community resources, and prints reports and queries.

Donor Network (3 disks) - Shareware donation and pledge tracking system from A & M Software (U) IBM-PC (HD).
Detailed pledge and contribution transactions, including matching gifts, with the ability to pinpoint specific funds or projects. Over 50 reports available including mailing labels and phone directories.

EZ-Forms (1 disk) - Forms generator and manager from EZX Corp. (U) IBM-PC.
Helps design, store and print master forms. Forms can also be filled in on the screen, printed and stored. Over 100 pre-designed, modifiable forms are available.

Fixed Asset Manager (2 disks) - Shareware Fixed asset system from A + M Software (U) IBM-PC (HD).

A fixed asset system that handles multiple depreciation methods.

Fund Accountant (2 disks) - Shareware fund accounting system from A + M Software (U) IBM-PC (HD).
Handles 9999 Accounts, 99 funds, 26 checkbooks and unlimited projects. Statements by organization, fund, or project. Automatic posting of receipt and disbursement entries.

Fund Accounting (1 disk) - Demo from Easter Seal Society (D) IBM-PC.
Presents the highlights and data entry screens from different module of two versions.

Fund Accounting Manager (2 disks) - Demo from Easter Seal Society (D) IBM-PC.
Designed to handle the complete accounting requirements of health and human service organizations.

HSS (1 disk) - General Ledger demo from Great Lakes Behavioral Research Institute (D) IBM-PC.
The Human Services Software General Ledger is one part of a fund accounting package.

In-site Billing (1 disk) - Demo from Applied Innovations (D) IBM-PC.
Addresses the billing and accounts receivable needs of individual practitioners.

MIS Manager (2 disks) - Shareware computer inventory tracking system from A + M Software (U) IBM-PC (HD).
Detailed depreciation journal entries each time depreciation is taken. Over 100 difference reports available including inventory labels.

MPB (1 disk) - Multi-Provider Billing System demo from Applied Innovations (D) IBM-PC.
Meets the billing, accounts receivable, and financial data base needs of group practices or clinics.

Painless Accounting (3 disks) - Office accounting system from Painless Accounting (U) IBM-PC (HD).
Provides a generic office accounting system that can be set up for an individual or small group practice.

Professionals' Billing System (2 disks) Clinical Practice Billing System from S.Shapse (U) IBM-PC (HD).
Handles the bookkeeping and administrative aspects of a clinical practice .

Volunteer Network (3 disks) - Shareware for tracking and scheduling volunteers from A + M Software (U) IBM-PC (HD). Regular schedules and special assignments. Automatic updating year-to-date and total hours with each work entry. Ability to search for volunteers with particular skills and experiences and print about 200 reports.

* **HSIS** (3 disks) - Demos of general purpose human service information system. (D) IBM-PC.
An agency customizable menu driven system which will collect, track and report client, service, and financial data (disk 1). It can be integrated with a clinic accounts receivable system (disk 2). Also available is a fund raising system which organizes mailing lists, tracks giftes and pledges, produces labels, index cards and personalised letters and many reports (disk 3). Order disks separately or all together.

* **Nonprofit General Ledger** (1 disk) - Shareware non-profit general ledger. (U) IBM-PC.
Menu driven shareware separates revenues and expenses by service programme and funding source, prints income statements and balance sheets, provides an audit trail of transactions, compares expenses to receipts, etc.

* **SNAP-1** (1 disk) - Demo of a simple non-profit accounting program. (D) IBM-PC.
Demo of non-profit accounting system which prints cheques, records deposits and general entries for accounts receivable, payable and adjustments.

* **SuperSync** (1 disk) - Demo of software for analyzing and managing teams in the workplace. (D) IBM-PC.
Helps team leaders and managers construct, print, analyse, grapf and report surveys regarding teamwork.

Statistics:

CRUNCH (1 disk) - Demo from Crunch Software Corp.,(D) IBM-PC.
Crunch is a general purpose statistical package for the social sciences.

SPPC (4 disks) - Stat Package for the Personal Computer (student edition) from WALMYR Publishing Co. (F) IBM-PC.

SSPC student edition is a free "student" version of the complete SPPC statistical analysis software package.

* **KWIKSTAT** (2 disks) - Shareware statistical package, version 1.3. (U) (C) IBM-PC.
KWIKSTAT covers basic statistics including multiple regression along with graphics output.

* **SAS** (2 disks) - Demo of the SAS statistical package. (D) IBM-PC.
Demo of a complete database and statistical package.

Welfare:

Child Abuse (1 disk) Intake Prioritization Expert System demo from Dick Schoech (F) IBM-PC.
A BASIC expert system shell along with rule sets for guessing animals, diagnosing a TV, and for prioritizing child abuse intake. Used to illustrate how an expert system works, see Computers in Human Services Vol.1 No.1.

* **TNCinfo** (2 disks) - Texas Networks for Children Electronic Information System. (U) IBM-PC.
Menu driven system enables the user to access information on 241 Texas residential facilities for children and youth. Good example of how an alliance of agencies can serve its membership.

Miscellaneous Packages and Utilities:

Book Maker (1 disk) from WALMYR Publishing Co. (L) IBM-PC.
Book Maker enables you to print small to huge manuals, monographs, or books by collecting and printing any number of ASCII text files as a single integrated volume.

Disk Protector (1 disk) from WALMYR Publishing Co. (L) IBM-PC.
With Disk Protector, your PC will require a password upon bootup, thus preventing unauthorized access.

EXSYS (2 disks) Expert System Shell demo from EXSYS, Inc. (D) IBM-PC.
The EXSYS (2 disks) demo includes the shell for creating a 25 rule system, a tutorial, and a manual. Good for understanding expert systems.

Pen Pal (1 disk) from WALMYR Publishing Co. (L) IBM-PC.
Pen Pal correspondence and encryption system helps keep private interviews, letters, questionnaires, etc., very confidential.

* **Campaign Jr.** (1 disk) - Demo of software to manage a small political campaign. (D) IBM-PC.
Demo of software which provides list management, contribution tracking, financial reporting, volunteer management, and sending personalised/targeted letters. May be useful in advocacy efforts.

Why not write for New Technology in the Human Services? We welcome articles, short or long, comments, reviews and news items. At present we are especially interested in material which focuses on training, such as training staff in agencies to use computer systems, or using computer programs for human service teaching in colleges or training departments. If you have ideas or a possible contribution please contact Bryan Glastonbury.